

Excimer laser resonator with high spectral purity output beam - has filter between beam widening device and exit mirror

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Abstract

The laser resonator has an exit mirror (12), an angular dispersion element (14) and a device (28) for widening the laser beam incident on the latter. A filter (30) lies in the path of the beam between the beam widening device (28) and the exit mirror (12), or between the individual elements (P1, P2, P3) of the beam widening elements (28).

Pref. the filter (30) is an etalon which exhibits a bandwidth which is at least double the that of the resonator (10) with the beam widening device (28), but without the filter (30).

USE - E.g. in photolithography or micro-material processing.

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